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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,457	09/17/2001	Donald J. Stavely	10992614 -1	1314
7590 10/07/2004			EXAMINER	
HEWLETT-PACKARD COMPANY			YODER III, CHRISS S	
Intellectual Property Administration			ART UNIT	
P.O. Box 272400			2612	
Fort Collins, CO 80527-2400			PAPER NUMBER	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/955,457

Applicant(s)

STAVELY ET AL.

Examiner

Chriss S. Yoder, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of: \_\_\_\_\_
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 5, 7, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyadera et al. (US Patent # 5,550,587).
2. In regard to claim 1, note Miyadera discloses the use of a method of simulating fill flash in a camera system comprising the steps of determining distances from the camera to objects in a scene (column 6, lines 64-67), taking a photograph of the scene (figure 7: 229), and selectively adjusting the brightness of regions of the photograph based on the distance information (column 13, line 66 – column 14, line 6).
3. In regard to claim 5, note Miyadera discloses that the regions containing objects closer to the camera are lightened in the resulting photograph in relation to regions containing objects farther from the camera (column 14, lines 1-6).
4. In regard to claim 7, note Miyadera discloses the use of a camera system which simulates fill flash by determining distances from the camera to objects in a scene (column 6, lines 64-67), taking a photograph of the scene (figure 7: 229), and selectively adjusting the brightness of regions of the photograph based on the distance information (column 13, line 66 – column 14, line 6).

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5. In regard to claim 12, note Miyadera discloses that the system lightens regions containing objects closer to the camera in the resulting photograph in relation to regions containing objects farther from the camera (column 14, lines 1-6).

6. In regard to claim 14, note Miyadera discloses a camera comprising means for determining distances from the camera to objects in a scene (column 6, lines 64-67), a means for taking a photograph (figure 7: 229), and a means for selectively modifying the brightness of regions in the resulting photograph based on the distances (column 13, line 66 – column 14, line 6).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 – 4, 8, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyadera et al. (US Patent # 5,550,587) in view of Parulski et al (US Patent # 5,563,658).

8. In regard to claim 2, note Miyadera discloses the use of a method of simulating fill flash in a camera system as claimed in claim 1. Therefore, it can be seen that the Miyadera reference fails to disclose the taking of a series of photographs with the camera configured to focus on objects at various distances from the camera, storing said photographs along with a focus distance for each photograph, and analyzing the series of photographs and corresponding focus distances. Parulski discloses the taking

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of a series of photographs with the camera configured to focus on objects at various distances from the camera (column 6, lines 5-17; the camera continuously captures images until the focus is acquired), storing said photographs along with a focus distance for each photograph (column 6, lines 5-17; the contrast value is considered to be the focus distance information that is stored with the image), and analyzing the series of photographs and corresponding focus distances (column 6, lines 5-17; the camera is continually analyzing the images until an image is acquired in focus). Parulski teaches that the taking of a series of photographs with the camera configured to focus on objects at various distances from the camera, storing said photographs along with a focus distance for each photograph, and analyzing the series of photographs and corresponding focus distances is preferred in order to decrease the amount of time it takes to focus the camera (column 2, lines 25-31). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Miyadera device to include the taking of a series of photographs with the camera configured to focus on objects at various distances from the camera, storing said photographs along with a focus distance for each photograph, and analyzing the series of photographs and corresponding focus distances as suggested by Parulski.

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9. In regard to claim 3, note Parulski discloses the computing of the contrast in the image (column 6, lines 5-17).

10. In regard to claim 4, note Parulski discloses that the step of determining the distances to objects at locations in the scene further comprises locating the particular photograph in the series of photographs with the spatial contrast metric indicating that

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objects at that location in the scene in more nearly in focus in that particular photograph than in any other in the series of photographs (column 6, lines 5-17; the camera is continually analyzing the images until an image is acquired that is the best possible focused image) and identifying the distance from the camera to objects at that location in the scene as the focus distance stored in connection with that particular photograph (column 6, lines 5-17; the contrast value is considered to be the equivalent of the distance and is stored with the image).

11. In regard to claim 8, note Miyadera discloses the use of a method of simulating fill flash in a camera system as claimed in claim 7. Therefore, it can be seen that the Miyadera reference fails to disclose the taking of a series of photographs with the camera configured to focus on objects at various distances from the camera, storing said photographs along with a focus distance for each photograph, and analyzing the series of photographs and corresponding focus distances to determine the object distances. Parulski discloses the taking of a series of photographs with the camera configured to focus on objects at various distances from the camera (column 6, lines 5-17; the camera continuously captures images until the focus is acquired), storing said photographs along with a focus distance for each photograph (column 6, lines 5-17; the contrast value is considered to be the focus distance information that is stored with the image), and analyzing the series of photographs and corresponding focus distances to determine the object distances (column 6, lines 5-17; the camera is continually analyzing the images until an image is acquired in focus). Parulski teaches that the taking of a series of photographs with the camera configured to focus on objects at

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various distances from the camera, storing said photographs along with a focus distance for each photograph, and analyzing the series of photographs and corresponding focus distances to determine the object distances is preferred in order to decrease the amount of time it takes to focus the camera (column 2, lines 25-31).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the Miyadera device to include the taking of a series of photographs with the camera configured to focus on objects at various distances from the camera, storing said photographs along with a focus distance for each photograph, and analyzing the series of photographs and corresponding focus distances to determine the object distances as suggested by Parulski.

12. In regard to claim 10, note Parulski discloses the computing of the contrast in the image (column 6, lines 5-17).

13. In regard to claim 11, note Parulski discloses that the step of determining the distances to objects at locations in the scene further comprises locating the particular photograph in the series of photographs with the spatial contrast metric indicating that objects at that location in the scene are more nearly in focus in that particular photograph than in any other in the series of photographs (column 6, lines 5-17; the camera is

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continually analyzing the images until an image is acquired that is the best possible focused image) and identifying the distance from the camera to objects at that location in the scene as the camera focus distance stored in connection with that particular photograph (column 6, lines 5-17; the contrast value is considered to be the equivalent of the distance and is stored with the image).

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14. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyadera et al. (US Patent # 5,550,587).

15. In regard to claim 6, note Miyadera discloses the use of a method of simulating fill flash in a camera system as claimed in claim 5. Therefore, it can be seen that the Miyadera device fails to modify the brightness of regions in the resulting photograph in accordance with the inverse square law. Official notice is taken that the concepts and advantages of brightening an image in accordance with the inverse square law are notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Miyadera device to include the use of brightening the image in accordance with the inverse square law in order to compensate for the degraded image quality due to the effects of the inverse square law.

16. In regard to claim 13, note Miyadera discloses the use of a camera system which simulates fill flash by determining distances from the camera as claimed in claim 12. Therefore, it can be seen that the Miyadera device fails to modify the brightness of regions in the resulting photograph in accordance with the inverse square law. Official notice is taken that the concepts and advantages of brightening an image in accordance with the inverse square law are notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Miyadera device to include the use of brightening the image in accordance with the inverse square law in order to compensate for the degraded image quality due to the effects of the inverse square law.



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17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyadera et al. (US Patent # 5,550,587) in view of Parulski et al (US Patent # 5,563,658).

18. In regard to claim 9, note the primary reference of Miyadera in view of Parulski discloses the use of a camera system which simulates fill flash by determining distances from the camera as claimed in claim 8. Therefore, it can be seen that the primary device lacks a computer separate from the camera, and wherein the series of trial photographs and their focus distances are transmitted to the separate computer for analysis and the simulation of fill flash. Official notice is taken that the concepts and advantages of the transfer of image data along with additional information from a camera to an external computer is notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the primary device to include the use computer separate from the camera, and wherein the series of trial photographs and their focus distances are transmitted to the separate computer for analysis and the simulation of fill flash in order to edit the images for printing and storage.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US004782396: note the use of contrast to detect the focus value.

US006067114A : note the use of detecting the distance and brightness of objects in an image.

US005617141A : note the use of quality control based on distance in an image.

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US005808681A : note the use of distance measurement and white balancing.

US006021209A : note the use of distance detection using multiple images.

US004641942: note the use of contrast to detect the focus value.

US005515448A: note the use of distance measuring using stored images.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (703) 305-0344. The examiner can normally be reached on M-F: 8 - 4:30.

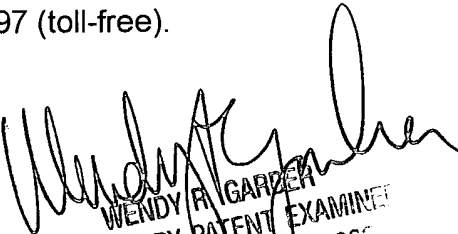
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free).

CSY  
September 30, 2004

  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2004